

General Vaccine Questions

Why are vaccines important?

It is always better to prevent a disease than to treat it after it occurs.

- Over the years, vaccines have prevented countless cases of disease and saved millions
 of lives. Diseases that used to be common in this country and around the world,
 including polio, measles, diphtheria, pertussis (whooping cough), rubella (German
 measles), mumps, tetanus, rotavirus and *Haemophilus influenzae* type b (Hib) can now
 be prevented by vaccination.
- Getting a vaccine also benefits your loved ones and people in your community by creating "herd immunity." If enough people are vaccinated, the disease cannot spread as quickly.
- Stopping a pandemic requires all the tools we have available.

Source: Vaccines and Immunizations | CDC

Where can I go for more information on vaccines, vaccination, and COVID-19?

- COVID-19 Vaccine (mecknc.gov)
- Facts about COVID-19 Vaccines (cdc.gov)
- Understanding How COVID-19 Vaccines Work | CDC
- Frequently Asked Questions about COVID-19 Vaccination | CDC
- Keep Children Healthy during the COVID-19 Pandemic | CDC
- Ensuring the Safety of COVID-19 Vaccines in the United States | CDC

COVID-19 Vaccine Questions

What is the COVID-19 vaccine and what does it do?

- The COVID-19 vaccine is a set of two shots provided to a person to give them protection from the coronavirus. COVID-19 vaccination helps protect you by creating an antibody response without having to experience sickness.
- Sometimes after vaccination, the process of building immunity can cause symptoms, such as soreness where you received the injection or fatigue. These symptoms are normal and are a sign that the body is building immunity.

Source: Understanding How COVID-19 Vaccines Work | CDC

What are the different types of COVID-19 vaccines?

Multiple vaccines to protect people from COVID-19 are in specific phases of development or approval. The chart below summarizes key facts for three companies that are developing the vaccines: **Pfizer, Moderna** and **AstraZeneca.**



Mecklenburg County Public Health COVID-19 Vaccine FAQ – General Public

	Pfizer Vaccine— EUA 12/11	Moderna Vaccine— EUA 12/18	AstraZeneca Vaccine
Vaccine Mechanism of Action (TYPE)	mRNA mechanism	mRNA mechanism	Vector mechanism
Efficacy	95% Effective against COVID-19	94.5% Effective against COVID-19	70% Effective against COVID-19
# Participants	43,000 Participants in Phase-3 trial	30,000 Participants in Phase-3 trial	11,000
Level of Diversity	42% of participants had diverse backgrounds	37% Diverse backgrounds	Unknown at this time
Storage Temperature and shelf life	Ultra-cold storage (-75 degrees Celsius, -103 degrees Fahrenheit). Lasts up to 5 days in refrigeration.	Storage temperature at -20 degrees C (-4 degrees F). Lasts up to 30 days in refrigeration.	Regular refrigeration (36-46 degrees F). Lasts up to 6 months in refrigeration.
Dosing Schedule	2-Dose schedule: 21 days apart	2-dose schedule: 28 days apart	2-Dose schedule: 28 days apart

Sources:

- 1.NC DHHS—COVID Vaccine
- 2. Moderna Provides Updates on the Clinical Development and Production of Its COVID-19

 Vaccine Candidate | Moderna, Inc. (modernatx.com)
- 3. Pfizer and BioNTech Conclude Phase 3 Study of COVID-19 Vaccine Candidate, Meeting All Primary Efficacy Endpoints | Pfizer
- 4.AZD1222 vaccine met primary efficacy endpoint in preventing COVID-19 (astrazeneca.com)

How do mRNA vaccines work? / How do the Pfizer and Moderna Vaccines work?

- mRNA vaccines teach our cells how to make a harmless piece of the "spike protein" for SARS-CoV-2.
 - After the protein piece is made, the cell breaks down the instructions (the mRNA) and gets rid of them.
- Cells display this piece of spike protein on their surface, and an immune response is triggered inside our bodies. This produces antibodies to protect us from getting infected if the SARS-CoV-2 virus enters our bodies.
- mRNA vaccines do not use the live virus that causes COVID-19. They CANNOT give someone COVID-19.
- mRNA vaccines **DO NOT** affect or interact with our DNA in any way

Source: CDC--COVID Vaccine Communications Toolkit



Do I need multiple doses of the COVID-19 vaccine?

For now, yes. The three leading vaccines are Pfizer, Moderna, and AstraZeneca. All require a second dose 21-28 days after the first shot.

Pfizer: 21 days Moderna: 28 days AstraZeneca: 28 days

Source: ACIP COVID-19 Vaccine

What are the side effects of the COVID-19 vaccine?

Some people may have temporary reactions after being vaccinated, such as some pain and swelling at the injection site, tiredness or feeling off for a day or two.

These mRNA vaccines are expected to produce side effects after vaccination, especially after the 2nd dose.

Side effects may include:

- · soreness at the injection site
- fatigue
- fever
- headache
- muscle aches

No significant safety concerns were identified in the clinical trials.

At least 8 weeks of safety data were gathered in the trials. It is unusual for side effects to appear more than 8 weeks after vaccination.

Sources:

- 1. NC DHHS COVID-19: Vaccines
- 2. Pfizer Vax EUA Fact Sheet for Recipients-short.pdf
- 3. CDC-What Clinicians Should Know

How do I know that the vaccine is safe?

Scientists had a head start. Although the vaccines were developed quickly, they were built upon years of work in developing vaccines for similar viruses.

Testing was thorough and successful. More than 70,000 people participated in clinical trials for two vaccines to see if they are safe and effective. To date, the vaccines are nearly 95% effective in preventing COVID-19 with no safety concerns.

There is no COVID-19 virus in the vaccine. The vaccine imitates the infection so that our bodies think a germ like the virus is attacking. This creates the antibody defenses we need to fight off COVID-19 if and when the real germ attacks.

Source: NC DHHS COVID-19: Vaccines



What are the benefits of getting a COVID-19 vaccine?

- The vaccine will help protect you from getting COVID-19.
- COVID-19 can have serious, life-threatening complications, and there is no way to know how COVID-19 will affect you.
- If you get sick, you could spread the disease to friends, family, and others around you.
- Getting the vaccine, in addition to wearing a mask, social distancing, and washing hands, is an important tool to stop the pandemic.

Source: Benefits of Getting a COVID-19 Vaccine | CDC

How long will I be protected from COVID-19 after getting the vaccine?

Unfortunately, we won't know how long immunity lasts until we have a vaccine that is released and observed long-term. We will continue to update our information as new data is released.

Source: COVID-19 Vaccination FAQ | CDC

Should I get the vaccine if I currently have COVID? / Should I get the vaccine if I have already had COVID?

Pfizer and Moderna Vaccine

For individuals that *currently have* COVID-19:

 Vaccination should be delayed until they recover from acute illness (if person had symptoms) and criteria have been met to discontinue isolation (as instructed by their healthcare provider or their local health department).

For individuals who have recovered from COVID-19:

- There is no minimum timeframe that a person who has recovered from COVID-19 should wait before getting the vaccine.
 - However, current evidence suggests reinfection is uncommon in the 90 days after initial *natural* infection. Therefore, people with documented acute infection (i.e. a positive COVID-19 test) in the last 90 days may defer vaccination until the end of this period, if desired.

Source: mRNA Vaccine Clinical Considerations | CDC

If I get the COVID-19 vaccine, do I still need to wear a face mask and socially distance?

Stopping a pandemic requires using all the tools available. Vaccines work with your immune system so your body will be ready to fight the virus if you are exposed.

Other steps, like covering your mouth and nose with a mask and staying at least 6 feet away from others, help reduce your chance of being exposed to the virus or spreading it to others.



Together, COVID-19 vaccination and following CDC's recommendations to protect yourself and others will offer the best protection from COVID-19.

- Wear a mask when you are in public places or not able to social distance.
- Avoid close contact with people who are sick.
- If you are sick, limit contact with others as much as possible to avoid infecting them.
- · Cover coughs and sneezes.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth.
- Clean and disinfect surfaces and objects that may be contaminated with viruses.

Source: Frequently Asked Questions about COVID-19 Vaccination | CDC

Who should NOT get a COVID-19 vaccine?

Severe allergic reaction (e.g., anaphylaxis) to any component of the specific vaccine the individual is receiving (Pfizer-BioNTech or Moderna COVID-19 vaccine) is a contraindication to vaccination

A severe allergic reaction to any vaccine or injectable therapy is a **precaution** to vaccination at this time.

 Vaccine providers should observe patients after vaccination to monitor for the occurrence of immediate adverse reactions

Children ages 15 and under should not receive the Pfizer vaccine at this time. Individuals ages 17 and under should not receive the Moderna vaccine this time.

More information to come as additional vaccines are approved.

Source: <u>Pfizer-BioNTech COVID-19 Vaccine EUA Fact Sheet for Recipients and Caregivers</u> (fda.gov)

Moderna COVID-19 Vaccine EUA Fact Sheet for Healthcare Providers (fda.gov)

If I have allergies, can I still get the COVID-19 Vaccine?

Most people with allergies can still get the COVID-19 vaccine.

The Centers for Disease Control (CDC) has issued guidelines that people who have ever had a severe allergic reaction, known as anaphylaxis, **to any ingredient in a COVID-19 vaccine** should not get it, and to consult their doctor about getting the vaccine. This includes allergic reactions to PEG and polysorbate. Polysorbate is not an ingredient in either mRNA COVID-19 vaccine but is closely related to PEG, which is in the vaccines. People who are allergic to PEG or polysorbate should not get an mRNA COVID-19 vaccine.

Individuals with severe allergic reaction (e.g. anaphylaxis) to another vaccine or injectable medication may wish to consult with their medical provider; this is not an absolute



contraindication to get the vaccine. In other words, most people with allergies can still get the vaccine.

Source: COVID-19 Vaccines and Severe Allergic Reactions | CDC

Prioritization

How are recipients of the COVID-19 vaccine prioritized?

The supplies of the COVID-19 vaccine are limited and prioritized for groups at highest risk, including healthcare workers, people in long-term care facilities, and older adults. As supplies increase, all adults should be able to get vaccinated later in 2021. A COVID-19 vaccine may not be available for young children until more studies are completed.

North Carolina's prioritization plan was created based on recommendations from the CDC. The Advisory Committee on Immunization Practices (ACIP) set goals and identified ethical principles to guide this decision making. To learn more, visit the link below.

Source: How CDC Is Making COVID-19 Vaccine Recommendations | CDC

North Carolina's Vaccine Distribution Plan



Learn more about North Carolina's plan for vaccine prioritization and distribution at NC DHHS COVID-19: Vaccines or view this Infographic of Vaccine Phases.